AMENDMENTS TO THE TITLE

Please amend the title as follows:

~~Optical Disk Apparatus and Optical Disk~~Optical disk apparatus for detecting tilt of an optical disk, and an optical disk for tilt detection

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraphs beginning on page 1, lines 10-20 as follows:

It is effective to increase the numerical aperture of an objective lens and to shorten a laser wavelength ~~for maximizing~~in order to maximize the capacity of an optical disk. Also, in recent years, the development of a multilayer recordable optical disk has ~~been~~ progressed. In multilayer recording, it is important to keep a laser beam from attenuating due to absorption or dispersion of the laser beam on a recording layer formed between a disk base member and a target recording layer in irradiating the laser beam onto the target recording layer via the disk base member. In view of this, there is proposed a technique of reducing unnecessary absorption and dispersion of a laser beam on a site other than a focusing spot by utilizing a nonlinear optical effect such as two-photon absorption.

Aberration by tilt is one of the drawbacks involved in maximizing the capacity of an optical disk. ~~Tilt~~ The word "tilt", as used throughout the specification and the ~~claims~~ claims, means tilt of an optical axis of a laser beam with respect to a normal line to a surface of a substrate of an optical disk. If the numerical aperture of an objective lens is increased, and the laser wavelength is shortened, an influence of aberration due to tilt of an optical disk is increased. In some cases, a substantial thickness of a disk base member is increased if recording is attempted onto a layer proximate to the bottom of the optical disk in multilayer recording, with the result that an influence of aberration by tilt is significantly large. Such an aberration fails to obtain a clear focusing spot, and lowers reliability in recording/reproducing. Accordingly, in recording information of a large capacity onto an optical disk, it is essentially important to accurately detect tilt of the optical disk.

Please amend the paragraph beginning on page 2, line 7 as follows:

Aberration by tilt includes odd symmetrical aberration such as coma aberration and astigmatism. The following fact is known in an optical system of forming a focusing spot on a flat disk substrate such as an optical ~~disk.~~disk: ~~If aberration~~ if aberration has occurred in an incoming optical path, such an aberration may be cancelled in an outgoing optical path. Therefore, it is impossible to detect tilt of the optical disk simply by measuring aberration of a reflected beam from the focusing spot. This is one of the problems to be solved in tilt detection.

Please amend the paragraph beginning on page 4, line 22 as follows:

In view of the above problems ~~residing~~ present in the prior art, it is an object of the invention to provide an optical disk apparatus that is compatible with a multilayer optical disk, and is capable of performing tilt detection of a high precision, and an optical disk.

Please amend the sub-heading on page 7, line 10 as follows:

~~BEST MODE FOR CARRYING OUT~~DETAILED DESCRIPTION OF THE INVENTION

Please amend the paragraph beginning on page 75, line 1 as follows:

~~EXPLOITATION IN INDUSTRY~~INDUSTRIAL APPLICABILITY

The optical disk (optical disk-like information recording medium) according to the invention is useful in recording or reproducing digital data, and is useful in an optical disk apparatus for performing at least one of recording information on a recording layer of the optical disk, and reproducing information from the recording layer.